

#### ABSTRACT OF THE DISCLOSURE

Silicon infiltration technology, e.g., siliconizing or reaction-bonding, is used to produce ceramic-rich composite bodies having utility as ballistic armor. In the main embodiment of the invention, the ballistic armor includes a reaction-bonded silicon carbide body (RBSC). Good ballistic performance can be advanced by loading the porous mass or preform to be infiltrated to a high degree with one or more hard fillers, and by limiting the size of the morphological features making up the composite body. This control of "grain size" can be accomplished by controlling the size of the largest particles making up the porous mass to be infiltrated, but also of importance is controlling the processing conditions, particularly by controlling the factors that cause grain growth, coarsening of microstructure, and/or grain coalescence.